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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,207	07/30/2003	Mo Xu	S01.12-1167 / STL 11080.0	2018
27367 7590 06/23/2008 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3244			EXAMINER SAN MARTIN, EDGARDO	
			ART UNIT 2837	PAPER NUMBER
			MAIL DATE 06/23/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/630,207	<b>Applicant(s)</b> XU ET AL.	
	<b>Examiner</b> Edgardo San Martin	<b>Art Unit</b> 2837	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-7,9,17-20,22-24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9,17-20,22-24 and 26-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 2, 2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 3, 5 – 7, 9, 17 – 20, 23 and 26 – 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gidumal (US 6,296,691) in view of Dodd (US 6,116,373).

With regards to claims 1, 2, 9 and 26 – 28, Gidumal teaches a data storage device comprising a housing (Figs. 2A and 2B, Item 19); a disc stack assembly (Figs. 2A and 2B, Item 12) rotatably mounted to the housing, wherein the rotation of the disc stack assembly creates a fluid flow region proximate to the disc stack assembly; and an airflow guide (Figs. 2A and 2B, Item 11) that projects into the housing and comprises an

elastic wall in the fluid flow region of the disc stack assembly and the elastic wall having an elastic surface (Col.6, Line 57 – Col.7, Line 21); but fails to disclose wherein the elastic wall is an elastomeric damping material.

On the other hand, Dodd teaches an elastomeric material (Figs.1 and 2, Item 30) being used as a damping material (Col.2, Lines 30 – 43 and Col.4, Lines 4 - 20). The Examiner considers that Dodd inherently teaches the use of a curable gel-like elastomeric material (Col.2, Lines 30 – 43).

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Dodd elastomeric material as the Gimudal elastic wall because it would damp the vibrations created by the air flow and the rotation of the discs, providing a sound absorbing characteristic to the enclosure. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

With respect to claims 3, 6, 17, 20, 27, 28, 30 and 31, the Examiner considers that it would have been an obvious matter of design choice to formed in place the airflow guide because it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

With regards to claims 5, 7, 18, 19, 23 and 29, Gidumal teaches the limitations described in the claims (Figs.1A – 8; Col.6, Line 57 – Col.9, Line 35).

3. Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gidumal (US 6,296,691) in view of Dodd (US 6,116,373), and further in view of Izumi et al. (US 6,008,965).

Gidumal and Dodd teach the limitations discussed in a previous rejection, but fail to disclose wherein the filtration unit includes a first filter support adjacent the airflow guide and a second filter support spaced from the first filter support to support a filter between the two supports.

On the other hand, Izumi et al. teach a filtration unit (Fig.6) including a first filter support (Fig.6, Item 32) being an airflow guide and a second filter support (Fig.6, Item 39) spaced from the first filter support to support a filter (Fig.6, Item 40) between the two supports.

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Izumi et al. configuration with the Gidumal and Dodd design because it would provide the versatility of having a airflow guiding system and a filtration unit in a same unit. The guiding system would help maintain the flow profile in the area of the disk while directing some of the external flow towards the filtration unit, in this manner maintaining a clean airflow profile that would help minimize vibration on the disk system.

***Response to Arguments***

4. Applicant's arguments filed on March 31, 2008 have been fully considered but they are not persuasive.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971) references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA 1969). In this case, the Dodd reference is incorporated to disclose an elastomeric material being used as a damping material.

Regarding the amended and new claims, the arguments relating these claims would not be addressed since they are rejected for the first time as filed on March 31, 2008.

***Conclusion***

5. The attached hereto PTO Form 892 lists prior art made of record that the Examiner considered it pertinent to applicant's disclosure.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (571)272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edgardo San Martin/

Edgardo San Martín  
Primary Examiner  
Art Unit 2837  
Class 181  
June 24, 2008